

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8657 (1977): Tapered Withdrawal Sleeves for Rolling Bearings [PGD 13: Bearing]



“ज्ञान से एक नये भारत का निर्माण”

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“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

SPECIFICATION FOR
TAPERED WITHDRAWAL SLEEVES FOR
ROLLING BEARINGS

1. Scope — Covers the requirements of tapered withdrawal sleeves for use with rolling bearings in the diameter range of 40 to 500 mm and suitable for bearing dimension series 02, 03, 13, 22, 23, 30, 31 and 32.

2. Dimensions — As given in Table 1.

3. Material — Conforming to grade St 42-1079 of IS : 1079-1973 'Specification for hot rolled carbon steel sheet and strip (*third revision*)'.

3.1 Other suitable materials are C20 and C30 of IS : 2073-1970 'Carbon steel black bars for production of machined parts for general engineering purposes (*first revision*)' and class 2 and class 3 of IS : 1875-1970 'Carbon steel billets, blooms, slabs and bars for forgings (*third revision*)'.

4. General Requirements

4.1 Workmanship — The withdrawal sleeves shall be cleanly finished, sound and free from burrs and defects which may affect their serviceability.

4.2 Preservation — The withdrawal sleeves shall be supplied in a well-cleaned condition and suitably protected against corrosion.

5. Designation — A tapered withdrawal sleeve shall be designated by the sleeve bore diameter, nominal diameter of bearing bore at the small bore end (the two separated by a hyphen), the symbol 'HR', the sleeve length (see IS : 2398-1967 Identification code for rolling bearings) and the number of this standard.

Example:

A tapered withdrawal sleeve with sleeve bore diameter 145 mm, nominal diameter of bearing bore 150 mm, and nominal overall length of withdrawal sleeve and bearing ring 119 mm shall be designated as:

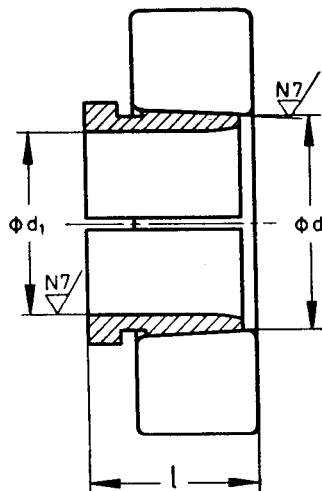
Withdrawal Sleeve 145 — 150 HR 119, IS : 8657

6. ISI Certification Marking — Details available with the Indian Standards Institution.

TABLE 1 DIMENSIONS OF TAPERED WITHDRAWAL SLEEVES WITH TAPER 1: 12

(Clause 2)

All dimensions in millimetres.



Nominal Size <i>d</i>	<i>d</i> ₁	Length, <i>l</i>							Screw Threads
		Suitable for Bearing Dimension Series							
		02	30	03 and 13	22	31	32	23	
40	35	27	—	32	32	—	—	43	M45×1.5
45	40	29	—	34	34	—	—	47	M50×1.5
50	45	31	—	38	38	—	—	53	M55×2
55	50	32	—	40	40	—	—	57	M60×2
60	55	35	—	43	43	—	—	61	M65×2
65	60	36	—	45	45	—	—	64	M75×2
70	65	37	—	47	47	—	—	68	M80×2
75	70	38	—	49	49	—	—	72	M85×2
80	75	39	—	52	52	—	—	75	M90×2
85	80	42	—	56	56	—	—	78	M95×2
90	85	44	—	57	57	—	67	83	M100×2
95	90	47	—	61	61	—	71	89	M105×2
100	95	49	—	63	63	68	77	94	M110×2
105	100	51	—	66	66	72	82	—	M115×2
105	100	—	—	—	—	—	—	98	M120×2
110	105	54	—	67	72	72	—	—	M120×2
110	105	—	—	—	—	—	86	102	M125×2
120	115	57	64	73	79	79	—	—	M130×2
120	115	—	—	—	—	—	94	109	M135×2
130	120	—	—	—	—	—	—	119	M150×2
130	125	57	71	78	82	82	—	—	M140×2
130	125	—	—	—	—	—	102	119	M145×2
140	135	61	73	82	88	88	—	—	M150×2
140	135	—	—	—	—	—	109	130	M155×3
150	145	65	77	—	—	—	—	—	M160×3
150	145	—	—	88	101	101	119	140	M165×3
160	150	69	82	—	—	—	—	—	M170×3
160	150	—	—	93	108	108	130	146	M180×3
170	160	74	90	—	—	—	—	—	M180×3
170	160	—	—	98	109	109	140	152	M190×3
180	170	74	98	—	—	—	—	—	M190×3
180	170	—	—	—	110	122	146	160	M200×3
190	180	78	102	—	—	—	—	—	Tr205×4
190	180	—	—	—	117	131	152	167	Tr210×4

(Continued)

TABLE 1 DIMENSIONS OF TAPERED WITHDRAWAL SLEEVES WITH TAPER 1 : 12 — *Contd*

Nominal Size d	d_1	Length, l						Screw Threads
		Suitable for Bearing Dimension Series						
		02	30	22	31	32	23	
200	190	82	108	—	—	—	—	Tr215×4
200	190	—	—	123	140	160	177	Tr220×4
220	200	91	117	—	—	—	—	Tr235×4
220	200	—	—	136	151	189	189	Tr240×2
240	220	102	123	150	161	197	197	Tr260×4
260	240	111	135	—	—	—	—	Tr280×4
260	240	—	—	161	179	213	213	Tr290×4
280	260	113	139	—	—	—	—	Tr300×4
280	260	—	—	163	183	220	220	Tr310×5
300	280	—	153	—	—	—	—	Tr320×5
300	280	—	—	178	200	236	—	Tr330×5
320	300	—	157	—	—	—	—	Tr345×5
320	300	—	—	190	217	254	—	Tr350×5
340	320	—	171	—	—	—	—	Tr365×5
340	320	—	—	—	234	273	—	Tr370×5
360	340	—	176	—	—	—	—	Tr385×5
360	340	—	—	—	238	283	—	Tr400×5
380	360	—	180	—	—	—	—	Tr410×5
380	360	—	—	—	242	294	—	Tr420×5
400	380	—	193	—	—	—	—	Tr430×5
400	380	—	—	—	250	312	—	Tr440×5
420	400	—	196	—	—	—	—	Tr450×5
420	400	—	—	—	276	331	—	Tr460×5
440	420	—	205	—	—	—	—	Tr470×5
440	420	—	—	—	281	341	—	Tr480×5
460	440	—	213	—	—	—	—	Tr490×5
460	440	—	—	—	296	360	—	Tr510×6
480	460	—	217	—	—	—	—	Tr520×6
480	460	—	—	—	307	376	—	Tr530×6
500	480	—	221	—	—	—	—	Tr540×6
500	480	—	—	—	325	405	—	Tr550×6

EXPLANATORY NOTE

Tapered withdrawal sleeves are used for facilitating the dismounting of rolling bearings. The requirements for locknuts, narrow series and lockwashers with straight inner tab have been covered in IS : 6731-1977 'Specification for locknuts, narrow series and lockwashers with straight inner tab for rolling bearings (first revision) '.

This standard conforms to ISO/R 113-1969 Rolling bearings accessories issued by the International Organization for Standardization (ISO).